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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
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EXAMINER	
SANEI, MONA M	
ART UNIT	**PAPER NUMBER**
2882	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/816,015	BERNARD DE MAN ET AL.	
	Examiner	Art Unit	
	Mona M. Sanei	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/31/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09142005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 19, 20, 22, 31, 32, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to Claims 6 and 7 (line 4), 19 (line 2-3), 20 (line 3), and 31 and 32 (line 2), the following limitation, "one or more line source" is claimed in addition to the one-dimensional array(s). One way to define a "line source" is a one-dimensional array. Therefore, it is does not make sense to claim a one-dimensional array and a "line source (i.e. one-dimensional array)" because they are essentially the same.

With respect to Claims 22 and 34 (line 2), the following limitation, "rotating around its axis" is unclear because it is not specific whether or not the term "its" refers to the axis of the system (i.e. the patient) or the axis of the hollow cylinder target. If the latter is the case, it is suggested that applicant changes the statement to the following, "rotating around its own axis."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by

> the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 27, 28, 29, 30, 31, 32, 39, 41, and 43 are rejected under 35 U.S.C. 102 (b) as being anticipated by Price et al. (2002/0085674).

With respect to Claims 1, 27, 39, 41, and 43, Price et al. teaches a method and apparatus for an imaging system ([0015], lines 1-4) that is comprised of a distributed x-ray source ([0022], lines 4-5; Fig. 3, #58) configured to generate x-ray radiation towards an imaging volume and a plurality of x-ray detectors ([0008], lines 5-8; Fig. 2, #18) for receiving the x-ray radiation after attenuation in the imaging volume and processing corresponding signals wherein both the distributed x-ray source and the detector array are rotated ([0015], lines 7-9 and [0016], lines 4-6; Fig. 2, #12).

With respect to Claim 28, Price et al. teaches the distributed x-ray source in the form of a two-dimensional source array ([0025], lines 1-2).

With respect to Claim 29, Price et al. teaches the distributed x-ray source in the form of a one-dimensional source array ([0025], lines 1-2; Fig. 3).

With respect to Claim 30, Price et al. teaches the one-dimensional distributed source array to extend around at least a portion of the aperture (as shown in Figure 3).

With respect to Claim 31, Price et al. teaches a one-dimensional distribution source array or a line source.

With respect to Claim 32, Price et al. teaches a two-dimensional distribution source array which is made up of more than one one-dimensional distribution source array or line source.

2. Claim 1 is rejected under 35 U.S.C. 102 (b) as being anticipated by Burke et al. (5,305,363).

With respect to Claim 1, Burke et al. teaches an imaging system (Col. 1, lines 14-18) that is comprised of a plurality of distributed x-ray sources configured to generate x-ray radiation towards an imaging volume (Col. 9, lines 6-10) and a ring of x-ray detectors (Col. 3, lines 16-19) for receiving the x-ray radiation after attenuation in the imaging volume and processing corresponding signals wherein the distributed x-ray source is rotated (Col. 2, lines 60-64) and the ring of x-ray detectors is rotated (Col. 3, lines 26-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 2, 13, 38, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. as applied to Claim 1 above, and in view of Richey et al. (4,547,892).

With respect to Claim 2, Price et al. teaches all the characteristic features of the invention but fails to teach an imaging system comprising a stationary x-ray source in combination with a rotating detector.

Richey et al. teaches an imaging system (Col. 2, lines 6-8) comprising a stationary x-ray source in combination with a rotating detector (Col. 5, lines 46-48).

It would have been obvious at the time of the invention to provide the alternate possibility of a stationary x-ray source in combination with a rotating detector as taught by Richey et al. to the imaging system of Price et al. One would have been motivated to make this modification because the flux of incident x-rays on the object remains constant, thus reducing rotational error.

With respect to Claim 13, Price et al. teaches a distributed x-ray source comprising a cold cathode emitter housed in a vacuum housing ([0026], Claim 1, lines 2-3) and a stationary anode disposed in a vacuum housing and spaced apart from the cold cathode emitter ([0026], Claim 1, lines 5-7).

4. Claim 9 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. and Richey et al. as applied to Claim 2 above, and further in view of Hu et al. (6,047,040).

With respect to Claim 9, Price et al. as modified by Richey et al. teaches all the characteristic features of the invention but fails to teach one or more two-dimensional arrays of detector elements.

Hu et al. teaches a detector comprised of a two-dimensional array of detector elements (Col. 2, lines 56-59; Figs. 1 & 2, #20) extending around at least a portion of the aperture (Col. 3, lines 10-15; Fig. 1).

It would have been obvious to one of ordinary skill at the time of the invention to include the two-dimensional detector taught by Hu et al. to the present invention. One would have been motivated to make this modification because the larger surface area allows for a greater probability of detection of the attenuated beams than a single element detector.

5. Claim 10 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. and Richey et al. as applied to Claim 2 above, and further in view of Nambu et al. (5,412,562).

With respect to Claim 10, Price et al. as modified by Richey et al. teaches all the characteristic features of the invention but fails to teach one or more one-dimensional arrays of detector elements.

Nambu et al. teaches a detector comprised of a one-dimensional array of detector elements (Col. 7, lines 67 to Col. 8, line 3; Fig. 8, #31) extending around at least a portion of the aperture (Col. 7, lines 48-50).

It would have been obvious to one of ordinary skill at the time of the invention to include the one-dimensional detector taught by Nambu et al. to the present invention. One would have been motivated to make this modification the one-dimensional array of detectors will have a greater probability of receiving the attenuated beams than a single element detector while also having the advantage of a lighter weight than a two-dimensional array of detectors.

6. Claim 12 is rejected under 103 (a) as being unpatentable over Price et al. and Richey et al. as applied to Claim 2 above, and further in view of Zhou et al. (2002/0094064).

With respect to Claim 12, Price et al. as modified by Richey et al. teaches all the characteristic features of the invention but fails to teach the distributed x-ray source to include a plurality of independently addressable source elements arrange in one or more arrays.

Zhou et al. teaches a plurality of independently addressable source elements ([0017], lines 1-4) arranged in an array ([0025], lines 1-2).

It would have been obvious to one of ordinary skill at the time of the invention to make one or more of the distributed x-ray sources taught by Price et al. include the independently addressable feature taught by Zhou et al. One would have been motivated to make this modification in order to target a specific region of the human body during imaging.

7. Claim 14 is rejected under 103 (a) as being unpatentable over Price et al. and Richey et al. as applied to Claim 2 above, and further in view of Dunham et al. (6,385,292).

With respect to Claim 14, Price et al. as modified by Richey et al. teaches all the characteristic features of the invention but fails to teach a distributed x-ray source comprising addressable emission devices.

Dunham et al. teaches a distributed x-ray source comprised of a plurality of addressable elements (Col. 2, lines 2-4) wherein the addressable elements are formed of emission devices (Col. 4, lines 54-55; Figs. 3 & 4, #58) where the following is a list of possible devices: cold-cathode emitter (Col. 2, lines 12-13), photo emitter (Col. 4, lines 61-62), ferroelectric emitter (Col. 4, lines 55-58), laser diode (Col. 4, lines 62-63), and monolithic semiconductor (Col. 7, lines 50-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the specific emission devices of Dunham et al. to the distributed x-ray source of Price et al. One would have been motivated to make this modification because the greater variety of emission device types increases the overall usefulness of the imaging apparatus.

8. Claims 2, 5, 6, 8, 11, and 19 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Burke et al. as applied to Claim 1 above, and in view of Richey et al.

With respect to Claim 2, Burke et al. teaches all the characteristic features of the invention but fails to teach an imaging system comprising a stationary x-ray source in combination with a rotating detector.

Richey et al. teaches an imaging system comprising a stationary x-ray source in combination with a rotating detector.

It would have been obvious to one of ordinary skill at the time of the invention to provide the alternate possibility of a stationary x-ray source in combination with a rotating detector taught by Richey et al. to the imaging system of Burke et al. One would have been motivated to make this modification because the flux of incident x-rays on the object remains constant, thus reducing rotational error.

With respect to Claim 5, Burke et al. teaches a one-dimensional array of source elements (cathode cups, Col. 7, lines 21-26; Figs. 3 & 4, #100) extending around the aperture (see Figs. 3 & 4).

With respect to Claim 6, Burke et al. teaches a one-dimensional array of source elements or a line source.

With respect to Claim 8, Burke et al. teaches a one-dimensional array of source elements extending around the aperture.

With respect to Claims 11 and 19, Burke et al. teaches a distributed x-ray source that includes a line source (Col. 7, lines 21-26; Figs. 3 & 4).

9. Claims 3, 4, and 7 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Burke et al. and Richey et al. as applied to Claim 2 above, and in view of Price et al.

With respect to Claims 3 and 4, Burke et al. as modified by Richey et al. teaches all the characteristic features of the invention but fails to teach the distributed x-ray source in the form of a two-dimensional array.

Price et al. teaches a distributed x-ray source in the form of a two-dimensional array.

It would have been obvious to one of ordinary skill at the time of the invention to provide replace the distributed one-dimensional source array that extends around the aperture taught by Burke et al. with the distributed two-dimensional source array taught by Price et al. One would have been motivated to make this modification because a greater amount of x-ray beams will be incident on the object to be imaged, thus increasing the probability of attenuated beams.

With respect to Claim 7, Price et al. teaches a two-dimensional distribution source array which is made up of more than one one-dimensional distribution source array or line source.

10. Claim 15, 16, 17, 18, 20, 25, 26, 40, and 44 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. as applied to Claim 1 above, and in view of Dafni et al. (5,966,422).

With respect to Claims 15 and 40, Price et al. teaches all the characteristic features of the invention, but fails to teach an imaging system comprising a rotating x-ray source in combination with a stationary detector.

Dafni et al. teaches a rotating x-ray source (Col. 5, lines 22-26) in combination with a stationary detector (Col. 3, lines 54-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the alternate possibility of a rotating x-ray source in combination with a stationary detector taught by Dafni et al. to the imaging system of Price et al. One would have been motivated to make this modification because holding the detector stationary eliminates the need for balancing which is necessary for the efficiency of any rotating component.

With respect to Claim 16, Price et al. teaches the distributed x-ray source in the form of a two-dimensional source array ([0025], lines 1-2).

With respect to Claim 17, Price et al. teaches the distributed x-ray source in the form of a one-dimensional source array (linear array, [0025], lines 1-2; Fig. 3).

With respect to Claim 18, Price et al. teaches the one-dimensional distributed source array to extend around at least a portion of the aperture (as shown in Figure 3).

With respect to Claim 20, Price et al. teaches a two-dimensional distribution source array which is made up of more than one one-dimensional distribution source array or line source.

With respect to Claim 25 and 26, Dafni et al. teaches a one-dimensional detector array that extends around the aperture (as shown in Figures 1d and 4e).

11. Claim 21 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. and Dafni et al. as applied to Claim 15 above, and further in view of Dawson (5,467,377).

Price et al. as modified by Dafni et al. teaches all the characteristic features of the invention but fails to teach the distributed one-dimensional array of source elements (or line source) to be positioned along the z-axis.

Dawson teaches an x-ray tube positioned along the z-axis (as shown in Figure 3).

It would have been obvious to one of ordinary skill at the time of the invention to position the distributed one-dimensional array of source elements taught by Price et al. along the z-axis as taught by Dawson. One would have been motivated to make this modification because it allows x-rays to more than just the x-y plane of the object being imaged.

12. Claim 22 is rejected under over Price et al., Dafni et al., and Dawson as applied to Claim 21 above, and further in view of Baker et al. (5,259,012).

With respect to Claim 22, Price et al. as modified by Dafni et al. and further modified by Dawson teaches all the characteristic features of the invention but fails to teach the target element of the distributed x-ray source configured as a hollow cylinder target.

Baker et al. teaches a target configured as a hollow cylinder target (Col. 9, lines 56-62; Figs. 5a & 5b).

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the hollow cylinder target taught by Baker et al. with the planar anode plate taught by Price et al. to yield a rotating hollow cylinder target. One would have been motivated to make this modification in order to provide a target that is enclosed rather than planar, which would thus increase the exposed surface area of the target and therefore increase the x-rays incident on the patient.

13. Claims 23 and 24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. and Dafni et al. as applied to Claim 15 above, and further in view of Subramanyan et al. (6,782,284).

With respect to Claims 23 and 24, Price et al. as modified by Dafni et al. teaches all the characteristic features of the present invention but fails to teach a two-dimensional array of detector elements that extends around the aperture.

Subramanyan et al. teaches an array of two-dimensional detector rings (Col. 3, lines 27-29; Fig. 1, #22).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the two-dimensional detector rings that extend around the aperture taught by Subramanyan et al. in place of the partial one-dimensional detector of Price et al. One would have been motivated to make this modification because it would greatly increase

the surface area of the detector, therefore the probability of detecting the attenuated beams would increase.

14. Claim 33 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. as applied to Claim 1 above, and further in view of Dawson (5,467,377).

Price et al. teaches all the characteristic features of the invention but fails to teach the distributed one-dimensional array of source elements (or line source) to be positioned along the z-axis.

Dawson teaches an x-ray tube positioned along the z-axis (as shown in Figure 3). It would have been obvious to one of ordinary skill at the time of the invention to position the distributed one-dimensional array of source elements taught by Price et al. along the z-axis as taught by Dawson. One would have been motivated to make this modification because it allows x-rays to more than just the x-y plane of the object being imaged.

15. Claim 35 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. as applied to Claim 1 above, and in view of Hu et al.

With respect to Claim 35, Price et al. teaches all the characteristic features of the invention but fails to teach one or more two-dimensional arrays of detector elements.

Hu et al. teaches a detector comprised of a two-dimensional array of detector elements (Col. 2, lines 56-59; Figs. 1 & 2, #20) extending around at least a portion of the aperture (Col. 3, lines 10-15; Fig. 1).

16. It would have been obvious to one of ordinary skill at the time of the invention to include the two-dimensional detector taught by Hu et al. to the present invention. One would have been motivated to make this modification because the larger surface area allows for a greater probability of detection of the attenuated beams than a single element detector.

17. Claim 36 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Price et al. as applied to Claim 1 above, and further in view of Nambue et al.

With respect to Claim 36, Price et al. teaches all the characteristic features of the invention but fails to teach one or more one-dimensional arrays of detector elements.

Nambu et al. teaches a detector comprised of a one-dimensional array of detector elements (Col. 7, lines 67 to Col. 8, line 3; Fig. 8, #31) extending around at least a portion of the aperture (Col. 7, lines 48-50).

It would have been obvious to one of ordinary skill at the time of the invention to include the one-dimensional detector taught by Nambu et al. to the present invention. One would have been motivated to make this modification the one-dimensional array of detectors will have a greater probability of receiving the attenuated beams than a single element detector while also having the advantage of a lighter weight than a two-dimensional array of detectors.

18. Claim 37 is rejected under 35 U.S.C 103 (a) as being unpatentable over Price et al. in view of Burke et al. (5,305,363).

With respect to Claim 37, Price et al. teaches an imaging system ([0015], lines 1-4) for scanning a volume to be imaged wherein the system is comprised of a distributed x-ray source ([0022], lines 4-5; Fig. 3, #58) configured to emanate an x-ray radiation, a control circuit operably coupled to the distributed x-ray sources ([0017], lines 1-2; Fig. 2, #26), a plurality of x-ray detectors ([0008], lines 5-8; Fig. 2, #18) for receiving the x-ray radiation after attenuation in the imaging volume, a motor controller configured to displace the distributed x-ray source and the detectors ([0019], lines 4-5; Fig. 2, #44), a processing circuit operably coupled to the detectors that is configured to receive the plurality of projection images and to form one or more reconstructed slices representative of the volume being imaged ([0017],

lines 8-10; Fig. 2, #34), and an operator workstation operably coupled to the processing circuit configured to display the one or more reconstructed slices ([0018], lines 1-5; Fig. 2, #36 & #40) wherein the distributed x-ray source and the detectors are arranged about a scanner aperture such that both the distributed x-ray source and the detector array are rotated in relation to the imaging volume during an imaging sequence ([0015], lines 7-9 and [0016], lines 4-6; Fig. 2, #12).

Price et al. fails to teach the distributed x-ray source substantially surrounding the imaging volume.

Burke et al. teaches a distributed x-ray source (Col. 7, lines 21-26; Figs. 3 &4) substantially surrounding the imaging volume (see Figs. 3 & 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to enhance the distributed x-ray source taught by Price et al. by expanding the source to substantially surround the imaging volume as taught by Burke et al. One would have been motivated to make this modification to acquire incident rays on the object at all angles without the need of rotation which can be troublesome due to rotational errors.

19. Claim 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. as applied to Claim 1 above, and in view of Richey et al. (4,547,892).

With respect to Claim 38, Price et al. teaches all the characteristic features of the invention but fails to teach an imaging system comprising a stationary x-ray source in combination with a rotating detector.

Richey et al. teaches an imaging system (Col. 2, lines 6-8) comprising a stationary x-ray source in combination with a rotating detector (Col. 5, lines 46-48).

It would have been obvious at the time of the invention to provide the alternate possibility of a stationary x-ray source in combination with a rotating detector as taught by

Richey et al. to the imaging system of Price et al. One would have been motivated to make this modification because the flux of incident x-rays on the object remains constant, thus reducing rotational error.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mona M. Sanei whose telephone number is (571) 272-8657. The examiner can normally be reached from Monday through Friday, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mona Sanei

EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER